Title (en)

METHOD FOR THE DECOUPLED CONTROL OF THE QUADRATURE AND THE RESONANCE FREQUENCY OF A MICRO-MECHANICAL GYROSCOPE

Title (de)

VERFAHREN ZUR ENTKOPPELTEN REGELUNG DER QUADRATUR UND DER RESONANZFREQUENZ EINES MIKROMECHANISCHEN GYROSKOPS

Title (fr)

PROCÉDÉ DE RÉGULATION DÉCOUPLÉE DE LA QUADRATURE ET DE LA FRÉQUENCE DE RÉSONANCE D'UN GYROSCOPE MICROMÉCANIQUE

Publication

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Application

EP 11708502 A 20110317

Priority

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- EP 2011054089 W 20110317

Abstract (en)

[origin: WO2011113916A1] The invention relates to a method for the precise measuring operation of a micro-mechanical rotation rate sensor, comprising at least one seismic mass, at least one drive device for driving the seismic mass in the primary mode (q1) and at least three trimming electrode elements (1) which are jointly associated directly or indirectly with the seismic mass. An electric trimming voltage (u1, u2, u3, u4) is set respectively between said trimming electrode elements (1) and the seismic mass. Each of said electric trimming voltages (u1, u2, u3, u4) are adjusted in accordance with a resonance frequency variable (uT, uT, 0), a quadrature variable (uc, uC, 0) and a restoring variable (uS).

IPC 8 full level

G01C 19/56 (2012.01)

CPC (source: EP KR US)

G01C 19/56 (2013.01 - EP KR US); **G01C 19/5726** (2013.01 - KR US); **G01C 19/5776** (2013.01 - EP KR); **G01P 15/125** (2013.01 - KR US)

Citation (search report)

See references of WO 2011113916A1

Cited by

US9377483B2; US9535084B2

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